

UNIX BASIC UTILITIES - PRINTING, EMAIL

<http://www.tutorialspoint.com/unix/unix-basic-utilities.htm>

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So far you must have got some idea about Unix OS and nature of its basic commands. This tutorial would cover few very basic but important Unix utilities which you would use in your day to day life.

Printing Files:

Before you print a file on a UNIX system, you may want to reformat it to adjust the margins, highlight some words, and so on. Most files can also be printed without reformatting, but the raw printout may not look quite as nice.

Many versions of UNIX include two powerful text formatters, **nroff** and **troff**. They are not covered in this tutorial but you would find a lot of material on the net for these utilities.

The pr Command:

The **pr** command does minor formatting of files on the terminal screen or for a printer. For example, if you have a long list of names in a file, you can format it onscreen into two or more columns.

Here is the syntax of **pr** command:

```
pr option(s) filename(s)
```

The **pr** changes the format of the file only on the screen or on the printed copy; it doesn't modify the original file. Following table lists some **pr** options:

Option	Description
-k	Produces k columns of output
-d	Double-spaces the output (not on all pr versions).
-h "header"	Takes the next item as a report header.
-t	Eliminates printing of header and top/bottom margins.
-l PAGE_LENGTH	Set the page length to PAGE_LENGTH (66) lines. Default number of lines of text 56.
-o MARGIN	Offset each line with MARGIN (zero) spaces.
-w PAGE_WIDTH	Set page width to PAGE_WIDTH (72) characters for multiple text-column output only.

Before using **pr**, here are the contents of a sample file named food

```
$cat food
Sweet Tooth
Bangkok Wok
Mandalay
Afghani Cuisine
Isle of Java
Big Apple Deli
Sushi and Sashimi
```

```
Tio Pepe's Peppers
.....
$
```

Let's use **pr** command to make a two-column report with the header *Restaurants*:

```
$pr -2 -h "Restaurants" food
Nov  7  9:58 1997  Restaurants  Page 1

Sweet Tooth           Isle of Java
Bangkok Wok           Big Apple Deli
Mandalay              Sushi and Sashimi
Afghani Cuisine       Tio Pepe's Peppers
.....
$
```

The lp and lpr Commands:

The command **lp** or **lpr** prints a file onto paper as opposed to the screen display. Once you are ready with formatting using **pr** command, you can use any of these commands to print your file on printer connected with your computer.

Your system administrator has probably set up a default printer at your site. To print a file named food on the default printer, use the **lp** or **lpr** command, as in this example:

```
$lp food
request id is laserp-525  (1 file)
$
```

The **lp** command shows an ID that you can use to cancel the print job or check its status.

- If you are using **lp** command, you can use **-nNum** option to print Num number of copies. Along with the command **lpr**, you can use **-Num** for the same.
- If there are multiple printers connected with the shared network, then you can choose a printer using **-dprinter** option along with **lp** command and for the same purpose you can use **-Pprinter** option along with **lpr** command. Here printer is the printer name.

The lpstat and lpq Commands:

The **lpstat** command shows what's in the printer queue: request IDs, owners, file sizes, when the jobs were sent for printing, and the status of the requests.

Use **lpstat -o** if you want to see all output requests rather than just your own. Requests are shown in the order they'll be printed:

```
$lpstat -o
laserp-573  john  128865  Nov  7  11:27  on laserp
laserp-574  grace  82744   Nov  7  11:28
laserp-575  john   23347   Nov  7  11:35
$
```

The **lpq** gives slightly different information than **lpstat -o**:

```
$lpq
laserp is ready and printing
Rank  Owner    Job  Files                Total Size
active john    573  report.ps            128865 bytes
1st   grace    574  ch03.ps ch04.ps       82744 bytes
2nd   john     575  standard input       23347 bytes
$
```

Here the first line displays the printer status. If the printer is disabled or out of paper, you may see different messages on this first line.

The cancel and lprm Commands:

The **cancel** terminates a printing request from the lp command. The **lprm** terminates lpr requests. You can specify either the ID of the request (displayed by lp or lpq) or the name of the printer.

```
$cancel laserp-575
request "laserp-575" cancelled
$
```

To cancel whatever request is currently printing, regardless of its ID, simply enter cancel and the printer name:

```
$cancel laserp
request "laserp-573" cancelled
$
```

The lprm command will cancel the active job if it belongs to you. Otherwise, you can give job numbers as arguments, or use a dash (-) to remove all of your jobs:

```
$lprm 575
dfA575diamond dequeued
cfA575diamond dequeued
$
```

The lprm command tells you the actual filenames removed from the printer queue.

Sending Email:

You use the Unix mail command to send and receive mail. Here is the syntax to send an email:

```
$mail [-s subject] [-c cc-addr] [-b bcc-addr] to-addr
```

Here are important options related to mail command:

Option	Description
-s	Specify subject on command line.
-c	Send carbon copies to list of users. List should be a comma-separated list of names.
-b	Send blind carbon copies to list. List should be a comma-separated list of names.

Following is the example to send a test message to admin@yahoo.com.

```
$mail -s "Test Message" admin@yahoo.com
```

You are then expected to type in your message, followed by an "control-D" at the beginning of a line. To stop simply type dot (.) as follows:

```
Hi,

This is a test
.
Cc:
```

You can send a complete file using a redirect < operator as follows:

```
$mail -s "Report 05/06/07" admin@yahoo.com < demo.txt
```

To check incoming email at your Unix system you simply type email as follows:

```
$mail  
no email
```